

# California WIC Program Presents

Rethink Your Drink for Healthy  
Smiles and Healthy Lives



## Trainee Workbook

March 2011



DEVELOPED BY THE  
California WIC Program, California Department of Public Health | *This institution is an equal opportunity provider.*



# **Agenda**

- 1. Welcome, Introductions, Agenda and Objectives Review**
- 2. Warm-Up Activity**
- 3. The Effects of Sugar-Sweetened Drinks On the Body**
- 4. The Effects of Sugar-Sweetened Drinks and Their Link to Obesity**
- 5. The Effects of Sugar-Sweetened Drinks on Dental Health**
- 6. Maintaining Good Dental Health**
- 7. Summary and Evaluations**

## **Objectives**

**At the end of this training, trainees will:**

- Learn how sugar-sweetened drinks can impact a person's overall health, weight and dental health.
- Learn how to convert grams of sugar to teaspoons, and identify how many teaspoons of sugar are in sugar-sweetened drinks.
- Identify ways to maintain good oral health.
- Identify the percentage of adults, adolescents and children who drink one or more sodas per day by county.
- Be prepared to share this information with participants, family, and friends.

## Activity 1

### Children's Life Expectancy Being Cut Short by Obesity

**Instructions:** Read the following story and circle the information you find interesting.

For the first time in two centuries, the current generation of children in America may have shorter life expectancies than their parents, according to a new report, which contends that the rapid rise in childhood obesity, if left unchecked, could shorten life spans by as much as five years.

The report in The New England Journal of Medicine, says the prevalence and severity of obesity is so great, especially in children, that the associated diseases and complications -- Type 2 diabetes, heart disease, kidney failure, cancer -- are likely to strike people at younger and younger ages.

The report says the average life expectancy of today's adults, roughly 77 years, is at least four to nine months shorter than it would be if there were no obesity. That means that obesity is already shortening average life spans by a greater rate than accidents, homicides and suicides combined, the authors say.

And they say that because of obesity, the children of today could wind up living two to five years less than they otherwise would, a negative effect on life span that could be greater than that caused by cancer or coronary heart disease.

"Obesity is such that this generation of children could be the first basically in the history of the United States to live less healthful and shorter lives than their parents," said Dr. David S. Ludwig, director of the obesity program at Children's Hospital Boston, and one of the authors of the report.

"We're in the quiet before the storm," Dr. Ludwig said. "It's like what happens if suddenly a massive number of young children started chain smoking. At first you wouldn't see much public health impact." He added, "But years later it would translate into emphysema, heart disease and cancer."

"There is an unprecedented increase in prevalence of obesity at younger and younger ages without much obvious public health impact," Dr. Ludwig said. "But when they start developing heart attack, stroke, kidney failures, amputations, blindness, and ultimately death at younger ages, then that could be a huge effect on life expectancy."

The report's lead author, Dr. S. Jay Olshansky, a professor of public health at the University of Illinois, Chicago, said he considered the report's projections of reduced life expectancy to be "very conservative, and I think the negative effect is probably greater than we have shown."

"Hopefully, we can fix obesity so that our projections are wrong," Dr. Olshansky added. "But we're seeing such large increases in obesity in the last couple of decades that it's hard to imagine that we're going to be able to work fast enough."

Pam Belluck, Excerpts from Children's Life Expectancy Being Cut Short by Obesity, The New York Times, 17<sup>th</sup> March, 2005  
Book by Walt Larimore, M.D. with Stephen and Amanda Sorenson, The Highly Healthy Child, First Edition, Zondervan Publishers, 2004. Link: <http://query.nytimes.com/gst/health/article-page.html?res=9F01E3D7133CF934A25750C0A9639C8B63>

## Activity 2

### Show Me the Sugar!

**Instructions:** Review Page 4 in your workbooks titled *Show Me the Sugar*. Discuss and answer the questions below in pairs or your table groups.

1. What is the serving size of the product?
2. How many servings are in the container?
3. How many grams of sugar are in one serving?
4. What names of sugar surprised you?
5. What did you learn from this activity that you can share with participants, family and friends?

# Show Me the Sugar!

Nutrition Facts		
Serving Size		1 Bar
Servings Per Container		6
Amt Per Serving		%DV
Calories	150	
Total Fat	2.5 g	4%
Saturated Fat	0 g	0%
Trans Fat	0 g	
Cholesterol	0 mg	0%
Sodium	85 mg	4%
Total Carbohydrate	30 g	
Dietary Fiber	2 g	9%
<b>Sugars</b>	<b>12g</b>	
Protein	3 g	
Potassium	350 g	

## SUGAR HAS MANY DISGUISES:

Sugar comes in many forms. Here are some common words for sugar in the Ingredients list:

Barley malt	High fructose corn syrup
Brown sugar	Honey
Cane juice	Maltodextrin
Corn syrup	Maple syrup
Dextrose	Molasses
Fructose	Powdered sugar
Glucose	Raw Sugar
Sucrose	

To find out how much sugar is in that package, first check the "Nutrition Facts" panel on the food package.

Look for the word "Sugars" to see how much sugar is in the food per serving. To find the hidden forms of sugar, check the "Ingredients."



## INGREDIENTS:

Oat bran, rice, **corn syrup**, **sugar**, **fructose**, whole grain rolled oats, **dextrose**, oat and fruit clusters (toasted oats [rolled oats, **sugar**, soybean oil, **honey**, **molasses**] **sugar**, rolled oats, strawberry flavored apples, **corn syrup**, **brown sugar**, natural and artificial flavors), **high fructose corn syrup**, vegetable oil, contains 2% or less of potassium chloride, **brown sugar**, sorbitol, glycerin, malt flavoring, natural and artificial flavor, salt, soy lecithin, niacinamide, nonfat dry milk, whole wheat flour, BHT, vitamin A, B6, riboflavin, thiamin mononitrate, folic acid, vitamin B12.

### Activity 3

## How Much Sugar is in Your Drink?

**Instructions:** Review Page 6 in your workbooks titled *How Much Sugar is in Your Drink*. Choose one of the popular drink cards from your table. Complete tasks 1-3. Answer the question on number 4 when you have completed the tasks.

**Materials:** Clear plastic cups, spoons, and table sugar for measuring the amount of sugar in the drinks.

1. Locate the ingredient (sugar) on the label.
2. Identify how many grams of sugar are listed on the label.
3. Divide the grams of sugar by 4. This will give you the amount of teaspoons in the product.

**Note:** If the container has more than one serving, multiply the number of teaspoons by the number of servings to get the total sugar in the container.

4. Using the cup, spoon and sugar, measure out the amount of sugar in the drink and pour into the cup provided.
5. What surprised you about this demonstration?

# How much sugar is in your drink?

grams of sugar (g) ÷ 4 = teaspoons of sugar

$$40 \div 4 = 10$$

GRAMS

TEASPOONS

## More than 1 serving per container?

Multiply: teaspoons of sugar per serving X number of servings = teaspoons of sugar per container

(Example: 2 servings per container: 10 teaspoons X 2 servings = 20 teaspoons per container)



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Edmund G. Brown Jr., Governor, State of California  
Diana Dooley, Secretary, California Health and Human Services Agency  
Mark B. Horton, MD, MSPH, Director, California Department of Public Health



## Activity 4 Bubbling Over

**Instructions:** Review page 8 in your workbooks titled *Bubbling Over*. Break up into pairs or your table groups and:

1. Identify the statistics for your county.
2. Describe how the statistics for your county compare to others.
3. Identify other interesting facts you discovered after reviewing the document.



# Bubbling Over:

SODA CONSUMPTION AND ITS LINK TO OBESITY IN CALIFORNIA

Percentage of Adults, Adolescents and Children Drinking One or More Sodas per Day by County

County	% Adults	% Adolescents (ages 12-17)	% Children (ages 2-11)
Alameda	17.4	58.9	31.0
Butte	20.3	61.8	30.4
Contra Costa	21.2	47.2	40.7
Del Norte, Siskiyou, Lassen, Trinity, Modoc, Plumas, Sierra	20.8	63.0	24.5
El Dorado	21.6	55.3	31.8
Fresno	35.0	68.7	53.1
Humboldt	16.4	50.3	33.2
Imperial	36.4	61.2	60.7
Kern	36.6	67.2	55.0
Kings	39.1	57.7	57.2
Lake	30.1	62.8	31.6
Los Angeles	25.5	64.9	44.3
Madera	37.4	75.3	39.9
Marin	10.6	41.3	18.4
Mendocino	18.8	39.0	38.1
Merced	32.7	*	55.4
Monterey	27.1	58.1	32.8
Napa	27.3	56.8	41.5
Nevada	17.5	40.9	25.6
Orange	23.4	56.4	36.9
Placer	18.4	66.2	31.5
Riverside	29.5	69.5	40.6
Sacramento	23.6	55.5	35.4
San Benito	25.6	58.9	26.4
San Bernardino	29.6	68.5	49.6

County	% Adults	% Adolescents (ages 12-17)	% Children (ages 2-11)
San Diego	21.1	63.1	34.8
San Francisco	10.9	42.1	21.5
San Joaquin	26.6	77.8	44.2
San Luis Obispo	18.3	66.8	41.7
San Matco	14.4	50.1	32.5
Santa Barbara	19.0	53.8	39.8
Santa Clara	21.1	48.2	40.9
Santa Cruz	15.5	56.0	41.4
Shasta	27.5	60.0	32.0
Solano	26.1	58.7	45.2
Sonoma	20.7	60.7	42.0
Stanislaus	34.3	*	47.5
Sutter	29.2	*	44.5
Tehama, Glenn, Colusa	30.1	*	36.8
Tuolumne, Calaveras, Amador, Inyo, Mariposa, Mono, Alpine	17.3	*	35.0
Tulare	36.1	71.0	44.2
Ventura	24.8	60.4	39.0
Yolo	13.9	62.4	37.3
Yuba	30.9	62.9	50.5

2005 California Health Interview Survey  
\*Indicates results not statistically reliable

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## **Activity 5**

### **Sugar-Loaded Beverages and Young Children**

**Instructions:** Review Page 10 in your workbooks titled *Sugar Loaded Beverages and Young Children*. In pairs or your table groups, discuss and write down the facts that you found surprising or interesting. Be prepared to discuss these facts with the large group.



# Sugar-Loaded Beverages and Young Children

Soda and other sugar-loaded beverages are not a healthy option for children

## YOUNG CHILDREN DRINK AN ENORMOUS AMOUNT OF SUGAR.

Forty-four percent of toddlers between 19 and 24 months drink a sugar-loaded beverage at least daily,<sup>1</sup> as do 70% of two- to five-year-olds.<sup>2</sup>

## CHILDREN ARE DRINKING MORE SODA AND LESS MILK THAN THEY USED TO.<sup>7</sup>

In the 1970s, children drank nearly three times more milk than soda. Today, they consume these beverages in equal amounts.<sup>8</sup> Because milk provides essential nutrients for bone development, replacing milk with soda can reduce bone mass and increase the risk for osteoporosis later in life.<sup>9</sup>

## SODA IS A MAJOR CONTRIBUTOR TO CHILDHOOD OBESITY.

Every additional daily serving of soda increases a child's risk for obesity by 60 percent.<sup>3</sup> Soda consumption in childhood also increases the risk for overweight and obesity in adulthood.<sup>4</sup>

## SODA DISPLACES HEALTHIER ITEMS FROM A YOUNG CHILD'S DIET.

Young children who consume a lot of sugar have a poorer quality of diet overall<sup>5</sup> because their empty calories replace healthier foods that provide essential nutrients like calcium, iron, and vitamin A.<sup>6</sup>

## SODA DAMAGES CHILDREN'S TEETH.

Soda consumption nearly doubles the risk of dental caries in children.<sup>10</sup> The acid in soda causes erosion of tooth enamel, often after just one sip, and the sugar in these beverages provide fuel for the bacteria that cause tooth decay. Because diet beverages also contain acid, they too increase the risk for cavities.<sup>11</sup>

## SODAS OFTEN CONTAIN CAFFEINE.

Sixty percent of sodas sold in the United States contain caffeine.<sup>14</sup> Children who consume the amount of caffeine in one 20-oz. soda can experience withdrawal symptoms like headaches and anxiety if they stop drinking soda.<sup>13</sup>

## DIET BEVERAGES ARE NOT A HEALTHY ALTERNATIVE FOR CHILDREN.

Diet sodas are detrimental to dental health, may contain caffeine, and their long-term effects are still unknown for children.<sup>14,15,16</sup>

## CHILDREN SHOULD NOT DRINK MORE THAN ONE SMALL SERVING OF 100% FRUIT JUICE PER DAY.<sup>17</sup>

Fruit juice has a high concentration of sugar and calories and lacks some of the nutrients and other benefits of whole fruit. It is best to offer children fresh whole fruit instead of juice. Infants under six months of age should not be given juice at all. Children six months to six years of age should not drink more than six ounces per day. Children over six years should not drink more than 12 ounces per day.<sup>17</sup> When children drink juice it should be 100% juice, not sugar-sweetened juice drinks.

*\*The term "soda" is used to represent all sugar-loaded beverages, including carbonated soft drinks, juice drinks, sports drinks, and energy drinks.*

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Because health doesn't just happen

November 2010

## Activity 6

### Maintaining Good Dental Health

**Instructions:** Take a few minutes to write down three things you have learned today that you will be able to share with participants, family, and friends on maintaining good dental health.

1.

2.

3.



## California WIC Program

### Rethink Your Drink for Healthy Lives and Healthy Smiles

**Date:** \_\_\_\_\_ **Agency:** \_\_\_\_\_

The Training and Career Development Section strives to improve the quality of our trainings. Please take a few moments to give us feedback by completing the following evaluation.

**Instructions:** Using the following scale, circle the number that best describes your rating for each statement.

<u>Strongly Disagree</u>	<u>Disagree</u>	<u>Agree</u>	<u>Strongly Agree</u>
1	2	3	4

#### COURSE DESIGN & MATERIALS

The purpose of the training was clear.	1	2	3	4
The training was related to my job.	1	2	3	4
The training materials were useful.	1	2	3	4
The training held my interest.	1	2	3	4
I can apply the skills I learned to my job.	1	2	3	4
I would recommend this training to others.	1	2	3	4

#### TRAINER

The trainer was knowledgeable.	1	2	3	4
The trainer demonstrated professional training skills.	1	2	3	4
The trainer encouraged interaction.	1	2	3	4
The trainer used time effectively.	1	2	3	4

(Over)

## **Evaluation Continued**

- 1. What was the most useful part of this training?**
  
  
  
  
  
  
  
  
  
  
- 2. On what topic(s) would you like more information?**
  
  
  
  
  
  
  
  
  
  
- 3. Please list at least one idea you will be able to use in your job as a result of attending this training.**
  
  
  
  
  
  
  
  
  
  
- 4. What suggestions do you have to improve the effectiveness of this course?**
  
  
  
  
  
  
  
  
  
  
- 5. Please share any additional comments you may have.**

**Thank you for your feedback!**